

IN THE CLAIMS:

Claims 1-12 (Previously Canceled)

13. (Currently Amended) A circuit board produced by the process of:

preparing a substrate having a joining surface;

disposing a plurality of masses of solder paste on the joining surface of the substrate;

heating and melting the masses of solder paste, thereby forming the masses of solder paste into a plurality of solder bumps on the joining surface of the substrate; and

flattening and levelling tops of the solder bumps, thereby making smaller a coplanarity of the solder bumps;

wherein the joining surface of the substrate has at least one curved portion in which at least one of the plurality of solder bumps is disposed on the at least one curved portion; and

wherein, prior to the flattening and levelling step, tops of the plurality of solder bumps are not coplanar with each other due at least in part to the at least one curved portion.

14. (Previously Added) A circuit board according to claim 13, wherein said flattening and levelling comprises pressing a flat surface of a jig against the tops of the solder bumps.

15. (Previously Added) A circuit board according to claim 13, wherein said flattening and levelling comprises grinding the tops of the solder bumps.

Claim 16 (Previously Canceled)

17. (Previously Added) A circuit board according to claim 13, wherein a coplanarity per unit length of the solder bumps is 0.5 (m or less).

18. (Previously Added) A circuit board according to claim 13, wherein circular pads are interposed between the respective solder bumps and the substrate, and the tops of the solder bumps are circular and smaller in diameter than the pads.

19. (Previously Amended) A circuit board according to claim 13, wherein circular pads are interposed between the respective solder bumps and the substrate, the tops of the solder bumps are nearly equal in diameter to the pads, and the height of the solder bumps is smaller than the diameter of the pads.

20. (Currently Amended) A circuit board produced by the process of:

preparing a substrate having a joining surface;

disposing a plurality of masses of solder paste on the joining surface of the substrate;

disposing a jig so that a flat surface of the jig is located at a predetermined position above the masses of solder paste; and

heating and melting the masses of solder paste to bring tops of the masses of solder paste into contact with the flat surface of the jig, thereby forming the masses of solder paste into solder bumps having tops that are flattened and leveled in such a way as to make smaller a coplanarity of the solder bumps;

wherein the joining surface of the substrate has at least one curved portion in which at least one of the plurality of solder bumps is disposed on the at least one curved portion; and

wherein, prior to the heating and melting step, tops of the plurality of solder bumps are not coplanar with each other due at least in part to the at least one curved portion.

21. (Previously Added) A circuit board according to claim 20, wherein a coplanarity per unit length of the solder bumps is 0.5 (μm or less).

22. (Previously Added) A circuit board according to claim 20, wherein circular pads are interposed between the respective solder bumps and the substrate, and the tops of the solder bumps are circular and smaller in diameter than the pads.

23. (Previously Added) A circuit board according to claim 20, wherein circular pads are interposed between the respective solder bumps and the substrate, the tops of the solder bumps are nearly equal in diameter to the pads, and the height of the solder bumps is smaller than the diameter of the pads.

Claim 24 (Currently Amended) A method of producing a circuit board comprising:

preparing a substrate having a joining surface;

disposing of a plurality of masses of solder paste on the joining surface of the substrate;

heating and melting the masses of solder paste, thereby forming the masses of solder paste into a plurality of solder bumps on the joining surface of the substrate; and

flattening and levelling tops of the solder bumps thereby making smaller a coplanarity of the solder bumps,

wherein the joining surface of the substrate has at least one curved portion in which at least one of the plurality of solder bumps is disposed on the at least one curved portion, and

wherein, prior to the flattening and levelling step, tops of the plurality of solder bumps are not coplanar with each other due at least in part to the at least one curved portion.

Claims 25-26 (Currently Withdrawn from Consideration)

Claim 27 (Previously Canceled)

Claim 28 (Currently Amended) A method of producing a circuit board comprising:

preparing a substrate having a joining surface;

disposing a plurality of masses of solder paste on the joining surface of the substrate;

disposing a jig so that a flat surface of the jig is located at a predetermined position above the masses of solder paste; and

heating and melting the masses of solder paste to bring tops of the masses of solder paste into contact with the flat surface of the jig, thereby forming the masses of solder paste into solder bumps having tops that are flattened and leveled in such a way as to make smaller a coplanarity of the solder bumps,

wherein the joining surface of the substrate has at least one curved portion in which at least one of the plurality of solder bumps is disposed on the at least one curved portion, and

wherein, prior to the heating and melting step, tops of the plurality of solder bumps are not coplanar with each other due at least in part to the at least one curved portion.

Claims 29-32 (Canceled).

Claim 33 (Currently Withdrawn From Consideration).